

ABSTRACT

A compatible hologram system has a supporting part for loadably supporting a recording medium made of a photosensitive material, a signal generating part for allowing a coherent beam modulated in response to predetermined data to enter the recording medium and providing a three-dimensional light interference pattern therewithin to produce a diffraction grating, and a data processing part for detecting reproduced data by diffracted light from the diffraction grating and demodulating the data to the predetermined data. The recording medium has a reference data area in which a reference diffraction grating corresponding to a three-dimensional light interference pattern of a coherent light beam modulated in response to reference data has been stored in advance, a sector data area in which sector data is recorded, and a user data area in which user data is recorded. The hologram system corrects the reproduced data in response to the reference data reproduced from the reference diffraction grating stored in the reference data area, the sector data reproduced from the sector area, and reference data provided within a reference memory of the data processing part, and demodulates the data to the predetermined data.